

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

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1. An apparatus for avoiding ocular muscular fatigue comprising:

5 a binocular light converging means comprising two optical elements for converging incident light, thereby reducing ocular convergence demand when said apparatus is worn by a user, wherein each of said optical elements comprising a spherical optical wedge with a base, said
10 bases being adjacent thereby forming base-in prisms.

2. An apparatus for avoiding ocular muscular fatigue comprising:

15 a binocular light converging means comprising two optical elements for converging incident light, thereby reducing ocular convergence demand when said apparatus is worn by a user; and

adjustment means for adjusting the separation of said optical elements according to pupil separation of a user.
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3. An apparatus for avoiding ocular muscular fatigue comprising a binocular light converging means comprising two optical elements for converging incident light, thereby reducing ocular convergence demand when said apparatus is
25 worn by a user, wherein said optical elements are 0.2 to 10 base lenses.

4. An apparatus for avoiding ocular muscular fatigue comprising a binocular light converging means comprising
30 two optical elements for converging incident light, thereby reducing ocular convergence demand when said apparatus is worn by a user, wherein said optical elements are additionally prescription lenses.

35 5. An apparatus as claimed in any one of claims 1 to 4, wherein said binocular light converging means is integral.

6. An apparatus as claimed in any one of claims 1 to 4, wherein said binocular light converging means is of

polycarbonate, acrylic or some other polymeric plastic material.

7. An apparatus as claimed in any one of claims 1 to 4,
5 wherein said binocular light converging means is a
magnifying binocular light converging means.

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8. An apparatus as claimed in any one of claims 1 to 4,
10 wherein said binocular light converging means includes or
is additionally at least one colour filter.

9. An apparatus as claimed in any one of claims 1 to 4,
wherein said binocular light converging means includes or
15 is additionally at least one colour filter, and said at
least one colour filter reduces the intensity of
transmitted yellow light.

10. An apparatus as claimed in any one of claims 1, 3 or
20 4, wherein said apparatus includes adjustment means whereby
the separation of the optical elements can be adjusted
according to pupil separation of a user.

11. An apparatus as claimed in any one of claims 1 to 4,
25 wherein said light converging means comprises two lenses.

12. An apparatus as claimed in any one of claims 2 to 4,
wherein each of said optical elements comprises an optical
wedge with a base, wherein said bases of said lenses are
30 adjacent thereby forming base-in prisms.

13. An apparatus as claimed in any one of claims 2 to 4,
wherein each of said optical elements comprises a spherical
optical wedge with a base, and said bases of said lenses
35 are adjacent thereby forming base-in prisms.

14. An apparatus as claimed in any one of claims 1, 2 or
4, wherein said optical elements are 0.2 to 10 base lenses.

15. An apparatus as claimed in any one of claims 1, 2 or

4, wherein said optical elements are 0.25 to 1.5 base lenses.

16. An apparatus as claimed in any one of claims 1, 2 or
5 4, wherein said optical elements are approximately 0.5 base lenses.

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10 17. An apparatus as claimed in any one of claims 1 to 3, wherein said optical elements are additionally prescription lenses.

18. An apparatus as claimed in any one of claims 1 to 4, wherein said optical elements are lenses provided as a pair of spectacles.

15 19. A method for reducing ocular muscular fatigue due to convergence demand comprising converging light prior to said light's incidence on a user's eyes by means of a pair of optical elements each comprising a spherical optical
20 wedge with a base, wherein said bases of said optical elements are adjacent thereby forming base-in prisms.

25 20. A method for reducing ocular muscular fatigue due to convergence demand comprising converging light prior to said light's incidence on a user's eyes by means of a pair of optical elements, wherein each of said optical elements comprises an optical wedge with a base, said bases of said optical elements are adjacent thereby forming base-in prisms, and said lenses are 0.2 to 10 base lenses.

30 21. A method for reducing ocular muscular fatigue due to convergence demand comprising converging light prior to said light's incidence on a user's eyes by means of a pair of optical elements, wherein optical elements are
35 additionally prescription lenses.

22. A method for reducing ocular muscular fatigue due to convergence demand comprising converging light prior to said light's incidence on a user's eyes by means of a pair

of optical elements, and adjusting the separation of the optical elements according to pupil separation of a user.

23. A method as claimed in any one of claims 19 to 22,
5 wherein said optical elements are integral with each other.

24. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are magnifying optical
elements.

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23. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are a pair of lenses.

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24. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are a pair of lenses each of
which comprises an optical wedge with a base, wherein said
bases of said lenses are adjacent thereby forming base-in
prisms.

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26. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are a pair of lenses each of
which comprises a spherical optical wedge with a base,
wherein said bases of said lenses are adjacent thereby
forming base-in prisms.

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27. A method as claimed in any one of claims 19, 21 or 22,
wherein said optical elements are 0.2 to 10 base lenses.

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28. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are 0.25 to 1.5 base lenses.

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29. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are approximately 0.5 base
lenses.

30. A method as claimed in any one of claims 19 to 22,
wherein said optical elements are additionally prescription
lenses.

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31. A method as claimed in any one of claims 19 to 22, wherein said optical elements are additionally colour filters.

Sub A1 5 32. A method as claimed in any one of claims 19 to 22, wherein said optical elements are additionally colour filters that reduce the intensity of transmitted yellow light.

10 33. A method as claimed in any one of claims 19 to 21, wherein the method includes adjusting the separation of the optical elements according to pupil separation of a user.

15 34. A method as claimed in any one of claims 19 to 22, including providing said optical elements as a pair of spectacles.

20 35. A pair of spectacles for avoiding ocular muscular fatigue comprising a pair of convergent lenses for converging incident light, thereby reducing ocular convergence demand when said spectacles are worn by a user, each of said lenses comprising a spherical optical wedge with a base, wherein said bases of said lenses are adjacent thereby forming base-in prisms.

25 36. A pair of spectacles for avoiding ocular muscular fatigue comprising a pair of convergent lenses for converging incident light, thereby reducing ocular convergence demand when said spectacles are worn by a user, 30 wherein said lenses are 0.2 to 10 base lenses.

35 37. A pair of spectacles for avoiding ocular muscular fatigue comprising a pair of convergent lenses for converging incident light, thereby reducing ocular convergence demand when said spectacles are worn by a user, wherein said spectacles are additionally prescription spectacles.

38. A pair of spectacles for avoiding ocular muscular

fatigue comprising:

a pair of convergent lenses for converging incident light, thereby reducing ocular convergence demand when said spectacles are worn by a user; and

adjustment means whereby the lenses' separation can be adjusted according to pupil separation of a user.

39. A pair of spectacles as claimed in any one of claims 35 to 38, wherein said lenses are 0.25 to 1.5 base lenses.

40. A pair of spectacles as claimed in any one of claims 35 to 38, wherein said lenses approximately 0.5 base lenses.

41. A pair of spectacles as claimed in any one of claims 35 to 38, wherein said lenses are integral with each other.

42. A pair of spectacles as claimed in any one of claims 35 to 38, wherein said lenses are magnifying lenses.

43. A pair of spectacles as claimed in any one of claims 35, 36 and 38, wherein said spectacles are additionally prescription spectacles.

44. A pair of spectacles as claimed in any one of claims 35 to 38, wherein said spectacles include, or said lenses additionally comprise, one or more colour filters.

45. A pair of spectacles as claimed in any one of claims 35 to 38, wherein spectacles include, or said lenses additionally comprise, one or more colour filters, and said one or more colour filters reduce the intensity of transmitted yellow light.

46. A pair of spectacles as claimed in any one of claims 35 to 37, wherein the spectacles are provided with adjustment means whereby the lenses' separation can be adjusted according to pupil separation of a user.